## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028752 Address: 333 Burma Road **Date Inspected:** 13-Nov-2012

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1730

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** Fred Michels and Steve Jensen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No

Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** 

**Delayed / Cancelled:** Yes No

34-0006 **Bridge No: Component: SAS OBG** 

### **Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower elevation 155 meters, QA randomly observed ABF welder Richard Garcia continuing to perform seal/fillet welding between the Tower head diaphragm and tower chimney vertical plate weld designation NS-E. The welder was noted welding seal/fillet welding in 2F (horizontal) position utilizing self-shielded Flux Cored Arc Welding (FCAW-S) with 0.072" diameter E71T-8 wire electrode implementing Caltrans Welding Procedure Specification (WPS) ABF-WPS-D15-F2200-2. Prior seal welding, the paint coating on both sides of the joint was ground off and the plates were preheated to more than 150 degrees Fahrenheit. During the shift, QA noted ABF QC Fred Michels was on site monitoring the in process preheats and welding parameters with measured working current of 340 amperes and voltage of 23 volts. At the end of the shift, seal/fillet welding of the Tower head diaphragm to chimney vertical plate inside was completed.

#### FW Spencer:

The QAI observe the ongoing installation, field fit-up and tack welding of the utility pipe support lug 5" long x 1" wide x 3/8" thick along the W2 grid line (panel point PP68). The lug pipe support was fillet welded on both sides of the 21/2" diameter domestic water line and 4" diameter compressed air line. The QC inspection was performed by Steve Jensen utilizing the Welding Procedure Specification (WPS) identified as Fillet Murex to monitor the tack welding and fillet welding to verify the welding parameters. The welding parameters were observed and

N/A

N/A

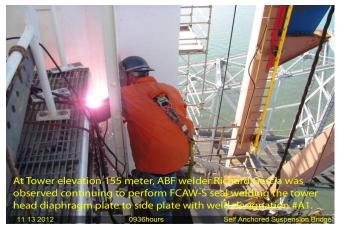
# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

recorded as 88 amps utilizing 2.4 mm electrodes with the welding performed in the 2F/4F positions. The tack welding/fillet welding was performed and completed by FW Spencer welder Damian Llanos. At the end of the shift, two (2) support lugs welded on each line were completed.







## **Summary of Conversations:**

No significant conversation occurred today.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Reyes, Danny	QA Reviewer